

CLAIM AMENDMENTS

1. (Original) A machine for conveying a carton including a lid having at least one flap along a path, comprising:

an overhead conveyor including at least one first lug selectively movable to a depending position for engaging and conveying the carton in a first direction along the path;

a takeaway conveyor adjacent to the overhead conveyor including at least one second lug selectively movable to an upstanding position for engaging and conveying the carton in a second direction along the path, said second direction being generally perpendicular to the first direction; and

means for folding the at least one flap while the carton is conveyed along the path by the overhead conveyor or the takeaway conveyor.

2. (Original) The machine according to claim 1, wherein the first lug moves between a retracted position overlying the conveying path and the depending position.

3. (Original) The machine according to claim 1, wherein the takeaway conveyor includes a pair of generally parallel conveyor chains, each including at least one second lug.

4. (Original) The machine according to claim 3, wherein each second lug is a pop-up lug movable between a retracted position below the conveying path and an upstanding position.

5. (Original) The machine according to claim 1, further including a rotatable wheel having at least one projection for at least partially closing the first flap before or during the engagement of the carton by the depending lug of the overhead conveyor.

6. (Original) The machine according to claim 1, wherein the means for folding the at least one flap includes a first stationary plow positioned along the overhead conveyor and at least one roller wheel for completing the folding in association with the plow.

7. (Original) The machine according to claim 6, wherein the carton includes first, second, and third flaps, and further including means for folding the second and third flaps positioned along the takeaway conveyor.

8. (Original) The machine according to claim 7, wherein the means for folding the second and third flaps comprises a stationary plow for associated with each of the second and third flaps and at least one roller wheel for completing the folding of each of the second and third flaps in association with the corresponding plow.

9. (Original) The machine according to claim 1, further including means for applying or activating an adhesive for sealing the at least one flap.

10. (Original) A machine for conveying a carton and at least partially folding a flap associated with a trailing end of the carton, comprising:

a rotatable wheel having at least one radially extending projection for engaging and at least partially folding the flap; and

an overhead conveyor including at least one lug selectively movable to a depending position for engaging the trailing end of the carton once the flap is at least partially folded by the projection and conveying the carton in a conveying direction,

whereby the partial folding by the wheel helps to prevent the flap from being damaged by the depending lug.

11. (Original) The machine according to claim 10, wherein the overhead conveyor includes a pair of parallel conveyor chains, each carrying a plurality of lugs independently and selectively movable to the depending position.

12. (Original) The machine according to claim 11, wherein the plurality of lugs associated with each chain overlap with each other in the conveying direction.

13. (Original) The machine according to claim 10, wherein the rotatable wheel includes a plurality of radially-extending projections.

14. (Original) The machine according to claim 10, further including a sensor for sensing the location of the carton and generating a signal used to actuate the wheel to rotate and move the projection into engagement with the flap.

15. (Original) The machine according to claim 10, further including a support surface along which the carton is conveyed by the overhead conveyor.

16. (Original) The machine according to claim 10, further including a takeaway conveyor for engaging and conveying the carton upon exiting the overhead conveyor.

17. (Original) The machine according to claim 16, wherein the takeaway conveyor is generally perpendicular to the overhead conveyor.

18. (Original) The machine according to claim 16, wherein the takeaway conveyor includes a pair of parallel conveyor chains, each including a plurality of lugs independently and selectively movable to an upstanding position.

19. (Original) The machine according to claim 10, further including an infeed conveyor for feeding randomly received cartons to the overhead conveyor at a substantially constant speed.

20-82 (Cancelled).

83. (Original) A method of completing a partially formed carton including a lid having a first flap along a trailing end thereof, comprising:

engaging and at least partially folding the first flap; and
conveying the carton with a lug depending from an overhead conveyor and in engagement with the at least partially folded first flap.

84. (Original) The method according to claim 83, wherein the engaging step comprises contacting the first flap with a projection extending radially from a

rotatably mounted wheel.

85. (Original) The method according to claim 83, wherein the conveying step includes further folding of the at least partially folded first flap using the depending lug.

86. (Original) The method according to claim 83, wherein the carton includes a second flap and the method includes the steps of folding and sealing the second flap while the carton is being conveyed by the depending lug.

87. (Original) The method according to claim 86, wherein the carton includes a third flap and the method includes the step of sealing the first and third flaps after the depending lug is no longer in contact with the carton and while conveying the carton in a second direction generally perpendicular to a first direction
5 in which the carton was conveyed by the depending lug.

88. (Original) The method according to claim 83, wherein the engaging and partial folding steps comprise engaging the flap with the depending lug.

89. (Original) A method of completing a partially formed carton including a lid having a first, second, and third flaps, comprising:

conveying the carton in a first direction with the first flap at least partially folded while the second flap is sealed; and

conveying the carton in a second direction generally perpendicular to the first direction while the first and third flaps are sealed.

90. (Original) The method according to claim 89, wherein the step of conveying the carton in the first direction comprises contacting the at least partially folded first flap with a lug depending from an overhead conveyor.

91. (Original) The method according to claim 90, wherein the step of contacting the first flap with the depending lug is completed after the first flap is partially folded by a rotatable wheel having a radially extending projection.

92. (Original) The method according to claim 91, wherein the step of conveying the carton in the second direction comprises contacting the carton with first and second upstanding lugs carried by each of first and second generally parallel, spaced endless chains.

93-95 (Cancelled).